PROFESSOR OF
AERONAUTICS AND ASTRONAUTICS
DIRECTOR
INTERNATIONAL CENTER FOR AIR TRANSPORTATION

ROOM 33-303
77 MASSACHUSETTS AVENUE
CAMBRIDGE, MASSACHUSETTS 02139
(617) 253-2271 FAX (617) 253-4196
E-MAIL: rjhans@mit.edu

May 10, 2004

NASA Software of the Year Evaluation Committee

Re: FACET Nomination

Dear Colleagues,

I am pleased to write in support of FACET's nomination for the NASA Software of the Year Award. As you know FACET is an analysis modeling tool which allows mesoscale evaluation of air traffic. This is an extremely valuable and flexible tool, which I have used in my research, my teaching, and in communicating about air traffic issues to the general public.

In the research mode, I have used FACET to evaluate air traffic complexity issues and traffic patterns under various current and projected conditions over different regions in the US. In the teaching mode, I have used FACET to illustrate non-linear dynamic effects in air traffic operations and also to illustrate specific temporal and spatial traffic behaviors and how the sector structure relates to the traffic patterns.

Perhaps, most significantly, I have found that the FACET derived examples of air traffic patterns over the United States are far and away the best illustration of the complexity and non-linear dynamics of the National Airspace System. I have used the FACET illustrations when testifying before Congress, the GAO and the media as well in general presentations to public and technical audiences on Air Traffic Control. Recently, Norm Augustine (former CEO and Chairman of Lockheed) saw my presentation of the FACET data and requested a copy for a National presentation he was giving.

In summary, this is a great tool and has had a significant impact on research, education and public awareness of Air Traffic Control issues.

Sincerely,

R. John Hansman
Professor of Aeronautics & Astronautics
Director, MIT International Center for Air Transportation